In the Claims:

Please amend Claims 1, 2, 6, 7, 12, 17, 18 and 31-37; cancel Claims 6, 17 and 33; and add Claims 38 and 39, all as shown below.

1. (Currently Amended) A system for high availability clustering of a group of computer nodes, comprising:

~~one or more~~ a plurality of computers interconnected to create a cluster network, each computer including a software cluster server~~, a cluster database,~~ and ~~a set of~~ a plurality of resources of multiple resource types,

wherein each resource of the plurality of resources are grouped in a resource group according to resource type, and ~~including software application servers,~~

wherein each software cluster server ~~operating at one of the one or more of the computers~~ provides an application access to the plurality of resources ~~set of resources~~ on ~~said~~ one of the plurality of computers~~, or at another one of the one or more computers interconnected to the cluster network~~; ~~wherein one of the one or more computers is designated as a group leader and the other computers are designated as members within the cluster, and wherein a cluster configuration file is maintained by the group leader to manage configuration information about the cluster, including the set of resources on each one of the one or more computers;~~

a remote resource interface at each of the plurality of computers provided by ~~said~~ the software cluster server, ~~provides an abstraction layer that allows the software cluster server to receive requests from the application and communicate the requests to said set of resources;~~ the remote resource interface including a plurality of plug-ins ~~plugins~~ that are plugged into the remote resource interface, wherein each plug-in includes one or more methods calls that operate on the plurality of resources, is specific to a particular resource type, and is loaded at a time when one of the plurality of resources of the particular resource type is created,

wherein a handle for each created resource type is returned by the plug-in for that resource type, and is used to invoke the one or more methods calls; and

wherein the remote resource interface isolates the software cluster server from resource-specific operations of each plug-in while providing access to the plurality of resources.

~~to provide a set of application-specific callbacks from the software cluster server to the set of resources, which application-specific callbacks facilitate communication of the requests from the application to the set of resources, wherein the resource interface accepts additional plugins that are plugged into the resource interface to provide application-specific callbacks from the software~~

~~cluster servers to other resource types;~~

~~wherein each computer in the cluster communicates the set of resources available on said computer to the group leader, and wherein when the requests from the application are received, the group leader~~

~~determines the availability of the set of resources on each one of the one or more computers by referencing the cluster configuration file, and~~

~~directs the request to the computer having the requested resource;~~

~~wherein the system can be extended by adding additional computers with cluster servers and resource interfaces operating thereon.~~

2. (Currently Amended) The system of claim 1 wherein each ~~of said~~ computer interconnected to create the cluster network includes a software cluster server having ~~servers includes~~ a heartbeat interface that provides heartbeat information to the software cluster server at each computer ~~other software cluster servers at said other application servers~~.

3.– 4. (Canceled)

5. (Previously Presented) The system of claim 1 wherein the system includes a cluster administration utility for accessing and administering the software cluster server using remote method invocation calls.

6. (Canceled)

7. (Currently Amended) The system of claim 6 wherein each resource ~~resources are the~~ is an object instance~~s~~ of ~~their~~ each resources respective resource type[[s]].

8. (Original) The system of claim 1 wherein a resource is any of a computer, internet protocol address, disk, database, or file system or application.

9. (Previously Presented) The system of claim 1 wherein the software cluster server defines resource groups that includes clusters of resources.

10. – 11. (Canceled)

12. (Currently Amended) A method for providing a high availability clustering framework system for a group of computer nodes, comprising the steps of:

allowing an application to access, via a software cluster server, a ~~set of~~ plurality of resources of ~~various~~ multiple resource types[[,]] located on ~~one or more~~ a plurality of computers interconnected to create a cluster network, wherein each computer includes a software cluster server~~, a cluster database,~~ and the ~~set of~~ plurality of resources of multiple resource types~~, including software application servers~~;

wherein each resource of the plurality of resources are grouped in a resource group according to resource type, and

wherein each software cluster server provides an application access to the plurality of resources on one of the plurality of computers;

~~wherein one of the is designated as a group leader, and the other computers are designated as members within the cluster, and wherein a cluster configuration file is maintained by the group leader to manage configuration information about the cluster, including the set of resources on each one of the one or more computers;~~

providing a remote resource interface at each one of the plurality of computers provided by ~~said~~ the software cluster server, ~~provides an abstraction layer that allows the software cluster server to receive requests from the application and communicate the requests to said set of resources;~~ the remote resource interface including a plurality of plug-ins ~~plugins~~ that are plugged into the remote resource interface, wherein each plug-in includes one or more methods calls that operate on the plurality of resources, is specific to a particular resource type, and is loaded at a time when one of the plurality of resources of the particular resource type is created,

wherein a handle for each created resource type is returned by the plug-in for that resource type, and is used to invoke the one or more methods calls; and

wherein the remote resource interface isolates the software cluster server from resource-specific operations of each plug-in while providing access to the plurality of resources.

~~to provide a set of application-specific callbacks from the software cluster server to the set of resources, which application-specific callbacks facilitate communication of the requests from the application to the set of resources, wherein the resource interface accepts additional plugins that are plugged into the resource interface to provide application-specific callbacks from the software cluster servers to other resource types;~~

~~wherein each computer in the cluster communicates the set of resources available on said computer to the group leader, and wherein when the requests from the application are received, the group leader~~

~~determines the availability of the set of resources on each one of the one or more computers by referencing the cluster configuration file, and~~

~~directs the request to the computer having the requested resource;~~

~~wherein the system can be extended by adding additional computers with cluster servers and resource interfaces operating thereon.~~

13. (Previously Presented) The method of claim 12 wherein said software cluster server includes a heartbeat interface provides heartbeat information to other software cluster servers at said other application servers.

14. – 15. (Canceled)

16. (Previously Presented) The method of claim 12 wherein the system includes a cluster administration utility for accessing and administering the software cluster server using remote method invocation calls.

17. (Canceled)

18. (Currently Amended) The method of claim 17 wherein each resource ~~resources are the~~ is an object instance~~s~~ of ~~their~~ each resources respective resource type[[s]].

19. (Original) The method of claim 12 wherein a resource is any of a computer, ip address, disk, database, or file system or application.

20. (Previously Presented) The method of claim 12 wherein the software cluster server allows for clustering resources within a resource group.

21. – 30. (Canceled)

31. (Currently Amended) A computer-readable storage medium carrying one or more sequences of instructions, which instructions, when executed by one or more processors, cause the one or more processors to carry out the steps of:

allowing an application to access, via a software cluster server, a ~~set of~~ plurality of resources of ~~various~~ multiple resource types[[,]] located on ~~one or more~~ a plurality of computers

interconnected to create a cluster network, wherein each computer includes a software cluster server~~, a cluster database,~~ and the ~~set of~~ plurality of resources of multiple resource types~~, including software application servers~~;

wherein each resource of the plurality of resources are grouped in a resource group according to resource type, and

wherein each software cluster server provides an application access to the plurality of resources on one of the plurality of computers;

~~wherein one of the is designated as a group leader, and the other computers are designated as members within the cluster, and wherein a cluster configuration file is maintained by the group leader to manage configuration information about the cluster, including the set of resources on each one of the one or more computers;~~

providing a remote resource interface at each one of the plurality of computers provided by ~~said~~ the software cluster server, ~~provides an abstraction layer that allows the software cluster server to receive requests from the application and communicate the requests to said set of resources;~~ the remote resource interface including a plurality of plug-ins ~~plugins~~ that are plugged into the remote resource interface, wherein each plug-in includes one or more methods calls that operate on the plurality of resources, is specific to a particular resource type, and is loaded at a time when one of the plurality of resources of the particular resource type is created,

wherein a handle for each created resource type is returned by the plug-in for that resource type, and is used to invoke the one or more methods calls; and

wherein the remote resource interface isolates the software cluster server from resource-specific operations of each plug-in while providing access to the plurality of resources.

~~to provide a set of application-specific callbacks from the software cluster server to the set of resources, which application-specific callbacks facilitate communication of the requests from the application to the set of resources, wherein the resource interface accepts additional plugins that are plugged into the resource interface to provide application-specific callbacks from the software cluster servers to other resource types;~~

~~wherein each computer in the cluster communicates the set of resources available on said computer to the group leader, and wherein when the requests from the application are received, the group leader~~

~~determines the availability of the set of resources on each one of the one or more computers by referencing the cluster configuration file, and~~

~~directs the request to the computer having the requested resource;~~

~~wherein the system can be extended by adding additional computers with cluster servers~~

~~and resource interfaces operating thereon.~~

32. (Currently Amended) The computer-readable storage medium ~~method~~ of claim 31, wherein the resource interface provides an interface between the software cluster server and a database, and wherein the resource interface accepts additional plug-ins ~~plugins~~ that are plugged into the resource interface to provide application-specific callbacks from the software cluster server[[s]] to other resource types.

33. (Canceled)

34. (Currently Amended) The system of claim 1, wherein the resource interface provides an interface between the software cluster server and a database, and wherein the resource interface accepts additional plug-ins ~~plugins~~ that are plugged into the resource interface to provide application-specific callbacks from the software cluster servers to other resource types.

35. (Currently Amended) The method of claim 12, wherein the resource interface provides an interface between the software cluster server and a database, and wherein the resource interface accepts additional plug-ins ~~plugins~~ that are plugged into the resource interface to provide application-specific callbacks from the software cluster servers to other resource types.

36 (Currently Amended) The system of claim 1, including a plug-in ~~plugin~~ for each resource type corresponding to a different application server, and wherein each plug-in ~~plugin~~ implements a resource API to encapsulate the plug-in's ~~plugin's~~ particular resource type-specific behavior, and to isolate the software cluster server from said behavior while providing access to each application server's set of resources.

37. (Currently Amended) The method of claim 12, further comprising:

providing a plug-in ~~plugin~~ for each resource type corresponding to a different application server, and wherein each plug-in ~~plugin~~ implements a resource API to encapsulate the plug-in's ~~plugin's~~ particular resource type-specific behavior, and to isolate the software cluster server from said behavior while providing access to each application server's set of resources.

38. (New) The system of claim 1, further including a group leader that is designated from one of the plurality of computers, and the other computers are designated as members within the cluster

network, said group leader maintaining a cluster configuration file to manage configuration information about the cluster network, including the plurality of resources on each one of the plurality of computers.

39. (New) The system of claim 38, further including a communication protocol implemented by each computer in the cluster to communicate the plurality of resources available on said computer to the group leader, where upon receiving a request to access the plurality of resources from the application, the group leader

determines the availability of the plurality of resources on each computer by referencing the cluster configuration file, and

directs the request to the computer having the requested resource;

wherein the system can be extended by adding additional computers with cluster servers and remote resource interfaces operating thereon when it is determined an amount of requests exceed a threshold.